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10/735,018	12/12/2003	Matthew Kenneth Gracie	56704.000109	2322
27682 7590 05/07/2008 HUNTON & WILLIAMS LLP INTELLECTUAL PROPERTY DEPARTMENT RIVERFRONT PLAZA, EAST TOWER 951 EAST BYRD ST. RICHMOND, VA 23219-4074				
EXAMINER				
TARAE, CATHERINE MICHELLE				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/735,018

Applicant(s)

GRACIE ET AL.

Examiner

C. Michelle Tarae

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The following is a Final Office Action in response to the communication received on August 31, 2007.

No claims have been amended. Claims 1 and 3-53 are now pending in this application.

Response to Amendments

2. No claims have been amended.

Response to Arguments

3. Applicant's arguments have been fully considered, but are not found persuasive.

In the Remarks, Applicant argues the following:

1) that Antell et al. "does not disclose a basic question set, that is asked of all users. The questions asked for authentication are dynamic. And since the basic question set changes, the expected answers change as well.";

2) that Antell et al. does not disclose, teach or suggest the basic question set comprises the minimum number of sequenced questions the answers to which would be sufficient to meet the regulatory criteria if no unexpected answers are given;

3) that Antell et al. does not disclose providing criteria for supplementing the basic question set with additional questions from the overall question set within the sequence of the basic question set, based on receiving an answer that differs from the expected answer, wherein the criteria are structured to minimize the number of

remaining questions that must be answered in order to comply with the regulatory criteria; and

4) that Antell et al. does not disclose conducting an optimized interactive customer survey with a customer using the overall question set, the basic question set, the expected answer and the criteria for supplementing the basic question set, wherein the basic question set is supplemented according to the criteria each time an answer is received that differs from the expected answer, and returning to the sequence of the basic questions set once the supplemental additional question from the overall question set are completed.

In response to argument 1), Examiner respectfully disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a basic question set, that is asked of all users) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Nowhere in the claims can the Examiner find that the basic question set is asked of all users. Examiner respectfully submits that as the claims are currently recited (see claim 1, for example), they only recite that a basic question set is determined from an overall question set, which is taught by Antell et al. The claims do not preclude a different basic question set for different users. It can be argued that as claim 1 is currently recited, it too offers a dynamic basic question set as it merely recites

that a basic question set is determined from an overall question set and therefore, can be construed as, each time a basic question set is determined from an overall question set, the basic question set may be different. Therefore, Examiner respectfully submits that Applicant is arguing limitations not expressly recited in the claims and, as a result, Antell et al. does teach determining from the overall question set a basic question set, wherein each question of the basic question set is associated with an expected answer (see at least paragraphs 7-8, where a basic question is asked from a listing of potential questions, and paragraphs 24 and 31, where answers to questions are evaluated (and may be compared to an external data source such as a credit report) for being "correct," or expected.).

In response to argument 2), Examiner respectfully disagrees. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

In response to argument 3), Examiner respectfully disagrees. Applicant supports his argument by saying that Antell et al. explains that additional questions are only asked "from a subsequent question set when responses to one or more previous question sets do not meet the authentication criteria" (from paragraph 9 of Antell et al.), and therefore, the user must answer the questions of the current question set before being asked questions for a subsequent question set. However, Examiner is unclear

how this is contrary to what is claimed. Claim 1, for example, recites "returning to the sequence of the basic questions set once the supplemental additional questions from the overall question set are completed." Thus, claim 1 also has a user answering all of the questions of the basic question set in addition to the supplemental questions. Additionally, Examiner did not rely on Antell et al. to teach the specific sequence of providing and answering questions (from the basic question set and from additional questions) as recited in claim 1. Accordingly, Examiner respectfully submits that Antell et al. does disclose providing criteria for supplementing the basic question set with additional questions from the overall question set within the sequence of the basic question set, based on receiving an answer that differs from the expected answer, wherein the criteria are structured to minimize the number of remaining questions that must be answered in order to comply with the regulatory criteria.

In response to argument 4), Examiner respectfully disagrees. Examiner did not rely on Antell et al. to teach the entire limitation. Examiner relied on Nagan et al. to teach the specific sequence of providing and answering questions. More specifically, Examiner relied on Nagan et al. to teach returning to the sequence of the basic question set once the supplemental additional questions from the overall question set are completed, which is the crux of this particular argument made by Applicant. Therefore, Applicant's argument is moot.

In conclusion Applicant's arguments have been fully considered, but are not found persuasive.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Antell et al. (U.S. 2004/0123162) and Nagan et al. (U.S. 2003/0126049).

As per claim 1, Antell et al. discloses a computer-implemented method of compiling a customer information set that complies with regulatory criteria, the method comprising:

providing an overall question set having a plurality of questions (paragraph 6; An overall question set is used to select questions from.);

determining from the overall question set a basic question set, wherein each question of the basic question set is associated with an expected answer and wherein the basic question set comprises the minimum number of sequenced questions the answers to which would be sufficient to meet the regulatory criteria if no unexpected answers are given (paragraphs 7-8, 24; The questions selected from the overall question set may be ordered (i.e., sequenced) and the answers are analyzed to determine if they match like information (i.e., are expected) from a data source. Users are attempted to be authenticated by a maximum number of questions, thereby minimizing the number of questions asked.);

providing criteria for supplementing the basic question set with additional questions from the overall question set within the sequence of the basic question set, based on receiving an answer that differs from the expected answer, wherein the criteria are structured to minimize the number of remaining questions that must be answered in order to comply with the regulatory criteria (paragraphs 9, 22-23, 34; Additional questions may be posed when responses to the previously asked questions do not meet the authentication criteria. Users are attempted to be authenticated by a maximum number of questions, thereby minimizing the number of questions asked.); and

conducting an optimized interactive customer survey with a customer using the overall question set, the basic question set, the expected answer and the criteria for supplementing the basic question set, wherein the basic question set is supplemented according to the criteria each time an answer is received that differs from the expected answer (paragraphs 23 and 34; Table C; The questions are used to conduct an interactive survey with a customer to authenticate the customer. If the customer is not authenticated by the first question set, a supplemental question set is used. Table C shows questions being assigned a priority (i.e., sequenced) ranking representing the order the questions are to be asked.).

While Antell et al. does disclose asking the questions in a sequence and asking supplemental questions when an answer that is not expected is received, Antell et al. does not expressly disclose returning to the sequence of the basic question set once the supplemental additional questions from the overall question set are completed.

Nagan et al. discloses asking supplemental questions to the original question and then returning to the sequence within the original question set (see pages 28-29 where if the answer to question 1 is "yes," then a series of supplemental questions (2a-2i) are asked. When the supplemental questions are completed, the survey returns to the original question set at question 3.). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Antell et al. to return to the sequence of the basic question set once the supplemental additional questions from the overall question set are completed because doing so maintains groupings of related questions, thereby enhancing the flow of questions and ease-of-use of the survey.

As per claim 3, Antell et al. discloses a method according to claim 1, wherein the action of conducting an optimized interactive customer survey includes:

displaying to a user the at least one question of the basic question set (see User Interface (item 19) in Figure 1); receiving from the user an answer to the at least one question of the basic question set (item 218 in Figure 2); determining whether the received answer differs from the expected answer associated with the at least one question of the basic question set (item 222 in Figure 2); responsive to a determination that the answer differs from the expected answer associated with the at least one question of the basic question set, establishing an updated question set using the overall question set, the basic question set and the criteria for modifying the basic question set (item 226 in Figure 2); and displaying to the user at least one question from the updated question set (item 228 in Figure 2).

As per claim 4, Antell et al. discloses a method according to claim 1, further comprising:

constructing a customer information set using answers received during the optimized interactive customer survey and storing the customer information set (paragraphs 6-7, 26; The answers are used to authenticate a customer, thereby formulating a customer authentication set.).

As per claim 5, Antell et al. discloses a method according to claim 1, wherein the basic question set includes a plurality of questions from the overall question set and wherein the action of conducting an optimized interactive customer survey includes:

displaying a first display question set consisting of a plurality of questions from the basic question set including at least one question having an associated answer ((item 19) in Figure 1); receiving from the user an answer to the at least one question having an associated expected answer (item 218 in Figure 2); determining whether the received answer differs from the expected answer associated with the at least one question having an associated expected answer (item 222 in Figure 2); and responsive to a determination that the answer differs from the expected answer, establishing an updated question set using the overall question set, the basic question set and the criteria for modifying the basic question set and displaying a question set consisting of a plurality of questions from the updated question set (item 226 in Figure 2), and displaying a second question set that is different from the first displayed question set (item 228 in Figure 2).

As per claim 6, Antell et al. discloses a method according to claim 1 further comprising:

associating an anticipated answer set with at least one of the plurality of supplemental additional questions, the anticipated answer set comprising at least one anticipated answer and responsive to receiving during the optimized interactive customer survey an answer to the at least one of the plurality of supplemental additional questions that matches one of the at least one anticipated answer, determining a risk contribution factor to be associated with the received answer (paragraphs 24, 31-32, 34; Table C allows different values to be assigned to different answers. Anticipated answers may be assigned points and a scoring according to the authentication criteria is performed where the scoring is an indication of whether or not the user has been authenticated (i.e., indicating a risk of unauthentication)).

As per claims 7-13, Antell et al. does not expressly disclose a method according to claim 6 wherein the risk contribution factor is determined from a predetermined risk contribution factor value associated with the at least one anticipated answer; wherein the risk contribution factor is determined based on a risk factor calculation that uses a first predetermined risk factor value, the first predetermined risk factor value being associated with the at least one anticipated answer; wherein the risk factor calculation also uses a second predetermined risk factor value, the second predetermined risk factor value being associated with a second anticipated answer that has been matched by a received answer; or determining an aggregate risk value. Nagan et al. discloses anticipated answers have predetermined risk contribution factor values. Total risk

factors are calculated by adding the risk contribution factor values of each response submitted by the customer (paragraphs 46-47, 65-66). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Antell et al. to determine a risk contribution factor for each anticipated answer and determine an aggregate risk value because doing so allows the system to factor in "degrees" or levels of risk indicating "degrees" or levels of unauthentication, thereby enabling the system to assess "how close" a customer is to being authenticated and therefore assess how many additional questions may be required to authenticate the customer.

As per claim 14, Antell et al. discloses a method according to claim 1, wherein the action of conducting an optimized interactive customer survey is carried out as part of a front-end customer identification procedure (paragraph 6).

As per claim 15, Antell et al. discloses a method according to claim 1 further comprising:

determining for at least one basic question set whether an answer to the at least one basic question set may be determined from non-customer-supplied information (paragraph 6; It is determined if answers to questions may be obtained from other data sources.). Antell et al. does not expressly disclose responsive to a determination that an answer to the at least one basic question set may be determined from non-customer-supplied information, removing the at least one basic question set from the basic question set. However, Examiner takes Official Notice that it is old and well known in the art of customer surveys to not ask a customer a question that has already been answered/obtained to avoid repetition and inconveniencing the customer. Therefore, at

the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Antell et al. to remove a question to be asked of the customer if the answer has already been obtained by a non-customer means as doing so enhances convenience of taking the survey for the user as the user has less questions to answer.

Claims 16-53 recite substantially similar subject matter to claims 1, 3-15 above. Therefore, claims 16-53 are rejected on the same basis as claims 1, 3-15 above.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Michelle Tarae whose telephone number is 571-272-

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6727. The examiner can normally be reached Monday – Friday from 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached at 571-272-6729.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/C. Michelle Tarae/
Primary Examiner, Art Unit 3623

May 5, 2008